

Attachment II

Application for Reissuance of NPDES Permit No. MI0001848

Monroe Power Plant

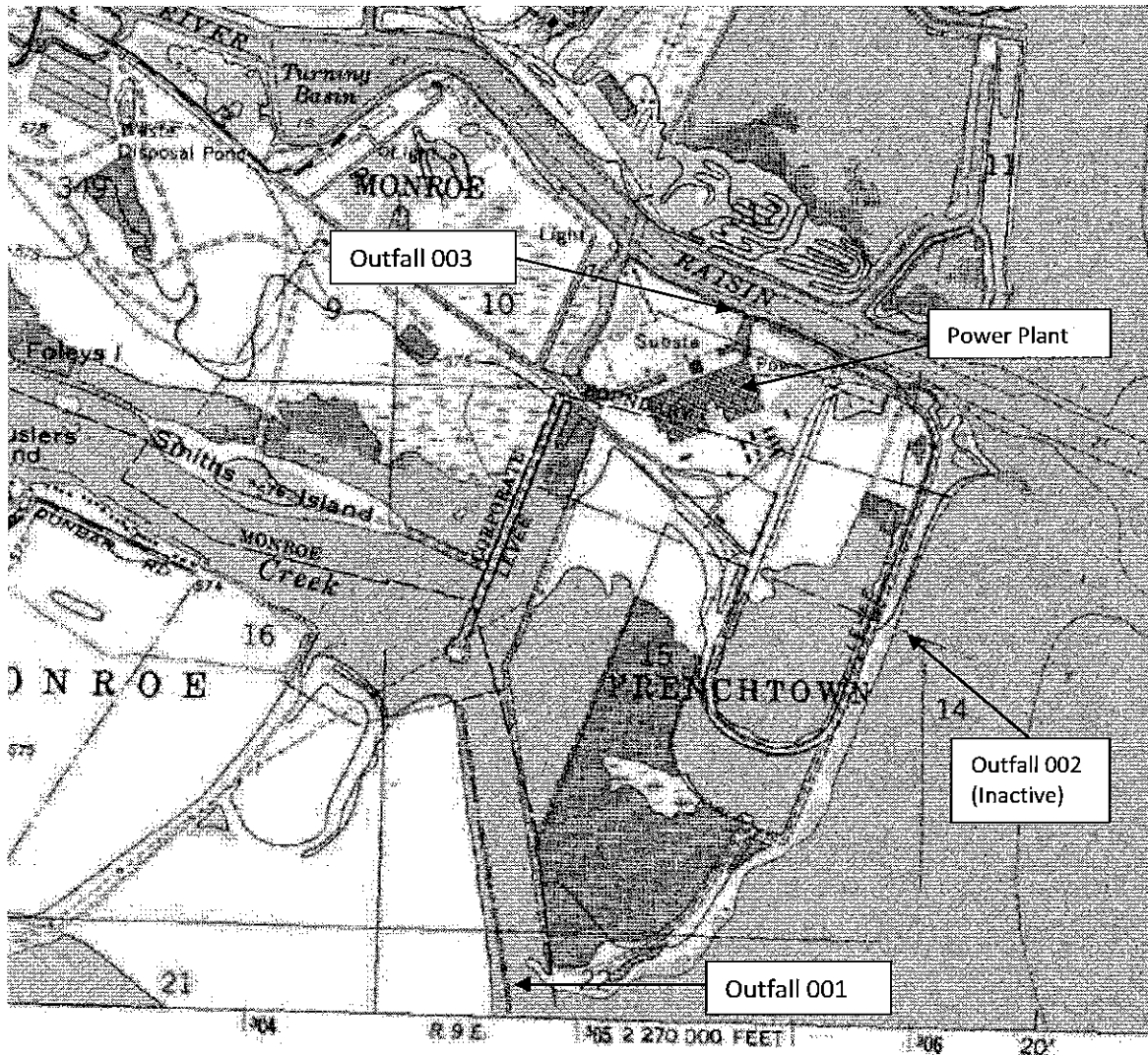
Section I, Item 10 - Narrative Description

Monroe Power Plant (MONPP) is located in Monroe County, Michigan, on the western shore of Lake Erie at the mouth on the River Raisin. There are four coal-fired supercritical boilers providing steam for four turbine generators, each nominally rated at 750 megawatts, for a total generating capacity of 3000 megawatts.

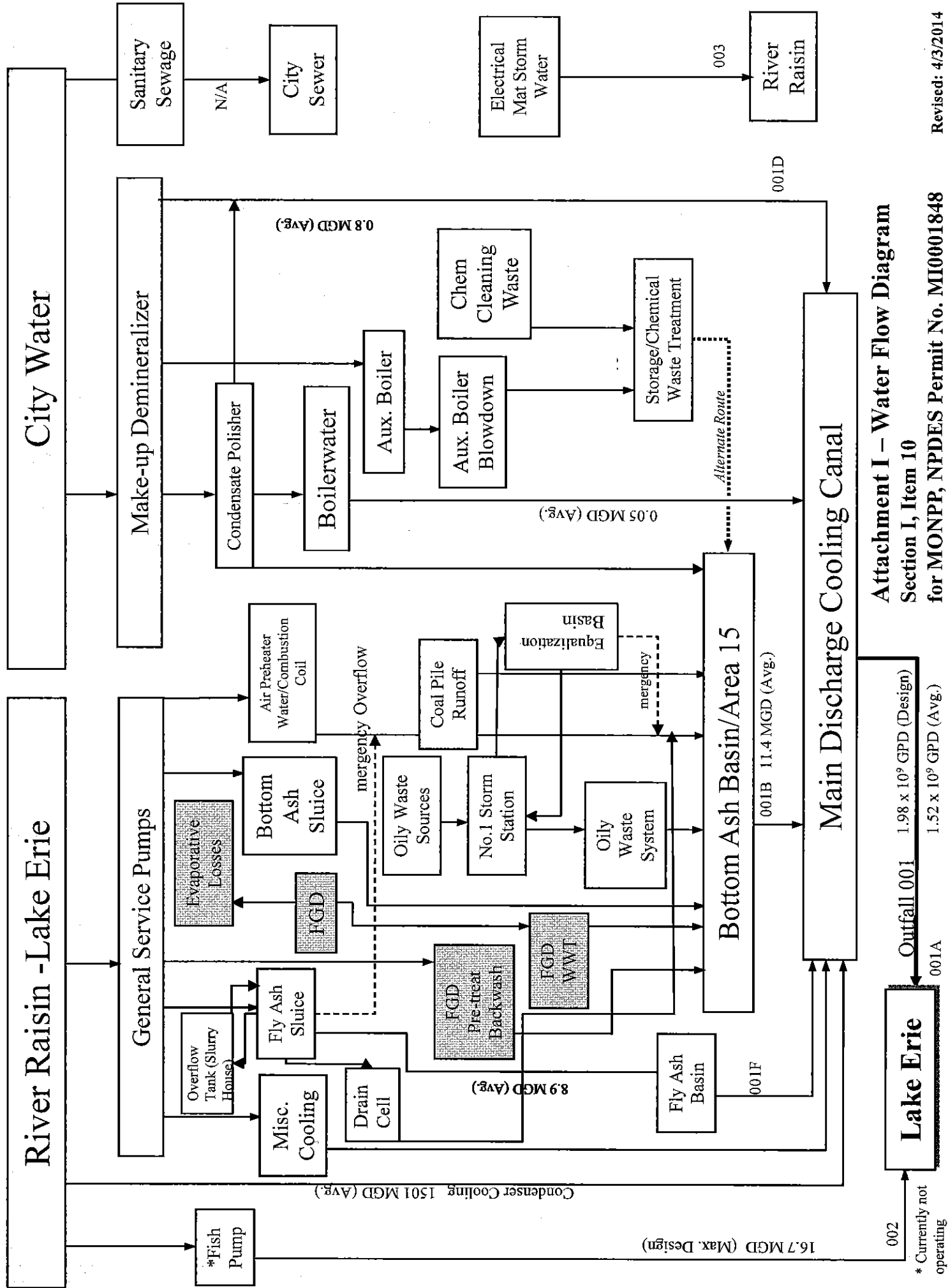
Two screen houses provide cooling water to the four units – two units per screen house, three 160,000 gpm pumps per unit, for a total flow capacity of 1,920,000 gpm. The Low Pressure General Service Water (LPGSW) System is fed by thirteen pumps each rated at 5000 gpm. Six of these pumps draw their water from the intake screen houses (“cold” water pumps) and the other seven pumps draw their water from the heated water discharge (“warm” water pumps). The “cold” and “warm” water pumps feed a common header and provide water for the fire fighting system, air heater wash lines, and some minor cooling water for small volume coolers. The majority of the LPGSW, however, goes to the ash slurry system. Approximately 80% of the LPGSW is used to slurry both bottom ash and fly ash for transport to treatment facilities. “Warm” water is used to help prevent freezing of slurry lines in winter. The flue gas desulfurization (FGD) system, which began operating in 2009, also utilizes LPGSW.

The majority of the water used by the plant is drawn from the River Raisin and Lake Erie. This water is used for once-through non-contact cooling, ash transportation, FGD operations, and miscellaneous purposes. Potable water is used for drinking water and other sanitary purposes and as feed water for the plant’s make-up demineralizers. Sanitary wastes are discharged to the local POTW. Once through cooling water is discharged to Lake Erie by way of the plant discharge canal. Potentially oil contaminated water is treated in oil-water separators prior to discharge. All of the process water is treated in settling basins for the removal of suspended solids prior to discharge. The plant has facilities for the treatment of Chemical Metal Cleaning Wastes, but has not discharged such wastes in several years. The water flow diagram (Attachment I) accompanying this application provides additional details on the plant’s water and wastewater flows.

Attachment III
Monroe Power Plant – NPDES Permit No. MI0001848
Application for Reissuance, 2014
Section I, Item 11 – Facility Map and Discharge Locations



NOTE: Map obtained from the most recent USGS map, which was developed using aerial photos from 1973. Some of the plant features have changed since then; however, outfall locations are shown in the current locations.



Michigan Department of Environmental Quality - Water Resources Division
WASTEWATER DISCHARGE PERMIT APPLICATION
SECTION I - General Information

PLEASE TYPE OR PRINT

FACILITY NAME	Monroe Power Plant	NPDES PERMIT NUMBER	MI0001848
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14. APPLICATION CERTIFICATION

Rule 323.2114(1-4), promulgated under the Michigan Act, requires that this Application must be signed as follows:

A. For an organization, company, corporation, or authority, by a principal executive officer, vice president, or higher
B. For a partnership, by a general partner
C. For a sole proprietor, by the proprietor
D. For a municipal, state, or other public facility, by a principal executive officer or ranking elected official (e.g., mayor, village president, city or village manager, or clerk)

Note: If the signatory is not listed above, but is authorized to sign the Application, please provide documentation of that authorization.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for having knowledge of violations."

The last Application for this facility was submitted on: April 2, 2009

I understand that my signature constitutes a legal agreement to comply with the requirements of the NPDES Permit. I certify under penalty of law that I possess full authority on behalf of the legal owner/permittee to sign and submit this Application.

Print Name Inderpal K. Deol Title Plant Manager

Signature Inderpal K. Deol Date 4/3/2014

This completes Section I. Publicly-Owned Treatment Works discharging sanitary and industrial wastewater to the surface waters, and privately-owned treatment works discharging sanitary wastewater to the surface waters should complete Section II. Privately-owned treatment works include, but are not limited to, Mobile Home Parks, Campgrounds, Condominiums, Hotels and Motels, and Nursing Homes. All other applicants should complete Section III. If assistance is needed to complete this Application, contact the Permits Section.

Permit Application Submittal Checklist

Please confirm the following before submitting the Application:

- ☒ 1. Section I has been completed, including all diagrams, maps, and the treatment process narrative.
- ☒ 2. The Application has been signed as required above in Section I.14.A-D, or a copy of the letter authorizing the signatory to sign the letter has been included, as appropriate.
- ☒ 3. Section II or Section III has been completed, including any additional information or submissions.
- ☒ 4. Section IV has been completed by any facility that discharges storm water.
- ☐ 5. Section V has been completed by any facility that is a Concentrated Animal Feeding Operation.
- ☒ 6. Section VI has been completed by any facility that has Cooling Water Intake Structures.
- ☒ 7. A check or money order for the appropriate application fee has been made out to the "State of Michigan" and has been included with the Application submittal.
- ☒ 8. E-mail addresses have been provided.